--Adjacent and proximate to each of the holes 728 and 730 are threaded openings 740 and 742, respectively, for receiving locking screws 744 and 746 respectively. Each of the locking screws 744 and 746 have a head portion 750 and a locking thread portion 754 for threadably and lockably engaging the threaded openings 740 and 742. The locking screws 744 and 746 are attached to the top member 714 after the projection screw members 716 and 717 have been inserted into the vertebrae V. At least a part of the head portion 750 and 752 blocks and preferably makes contact with the screw projections 716 and 717 to prevent any unwanted loosening and outward excursion of the screw projections 716 and 717.--.

## IN THE CLAIMS:

Please cancel claim 1 without prejudice or disclaimer of its subject matter and add the following new claims:

--54. An apparatus comprising:

> ah interbody spinal fusion implant for surgical implantation within a disc space between two adjacent vertebral bodies in a segment of a human spine, said implant comprising upper and lower portions for contacting each of the adjacent vertebral bodies when positioned therein, each of said upper and lower portions having at least one opening adapted to communicate with one of the adjacent vertebral bodies, said openings of said upper and lower portions being in communication with one another and adapted for permitting for the growth of bone from adjacent vertebral body to adjacent vertebral body through said implant, a hollow interior for holding bone growth promoting material, said hollow interior being in communication with at least one opening in each of said upper

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and lower portions, said implant having an insertion end for entry into the spine and a trailing end; and

bone morphogenetic protein for promoting bone growth contained within said hollow interior.

- 55. The apparatus of claim 54, wherein at least a portion of said upper and lower portions are arcuate along at least a portion of their length.
- 56. The apparatus of claim 54, wherein said upper and lower portions further comprise a protrusion for engaging the adjacent vertebral bodies.
- 57. The apparatus of daim 56, wherein said protrusion is a thread.
- 58. The apparatus of claim 54, wherein at least one of said insertion and trailing ends is open for loading bone growth promoting material into said hollow interior.
- 59. The apparatus of claim 58, further comprising an end cap for closing said open end.
- 60. The apparatus of claim 54, wherein said hollow interior is a chamber and the bone growth promoting material includes a bone graft.
- 61. The apparatus of claim 54 wherein said implant is configured for implantation across the disc space in the thoracolumbar region of the human spine.
- 62. The apparatus of claim 54, wherein said spinal implant includes an artificial material other than bone.
- 63. The apparatus of claim 54, wherein said implant is made of an artificial material that is stronger than bone.
- 64. The apparatus of claim 54, wherein said implant is made of an artificial material that is harder than bone.
- 65. The apparatus of claim 54, wherein said implant comprises harvested bone.
- 66. The apparatus of claim 54, wherein said implant is in combination with bone growth promoting material.
- 67. The apparatus of claim 66, wherein said bone growth promoting material is selected from one of hydroxyapatite and genes coding for the production of bone.
- 68. The apparatus of claim 54, wherein said implant is treated with a bone growth promoting substance.
- 69. The apparatus of claim 54, wherein said implant is a source of osteogenesis.

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